# (19) World Intellectual Property Organization International Bureau

ernational Bureau





(43) International Publication Date 12 May 2005 (12.05.2005)

**PCT** 

# (10) International Publication Number WO 2005/043944 A1

(51) International Patent Classification<sup>7</sup>: H04L 12/56

H04Q 7/28,

(21) International Application Number:

PCT/SE2004/001584

(22) International Filing Date:

2 November 2004 (02.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0302920-4

3 November 2003 (03.11.2003) SE

- (71) Applicant (for all designated States except US): TELE-FONAKTIEBOLAGET LM ERICSSON (PUBL) [SE/SE]; S-164 83 Stockholm (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ENEROTH, Göran [SE/SE]; Scheffers gränd 13, S-135 63 Tyresö (SE). SYNNERGREN, Per [SE/SE]; Fältspatstigen 10, S-977 53 Luleå (SE).
- (74) Agent: MAGNUSSON, Monica; Ericsson AB, Patent Unit Radio Networks, S-164 80 Stockholm (SE).

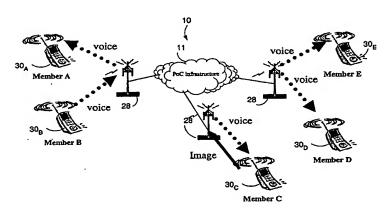
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR FLOOR CONTROL FOR GROUP CALL TELECOMMUNICATIONS SERVICES



(57) Abstract: A telecommunications network (10) comprises a group call service server (18) which facilitates a group call over a radio interface (32) between different user equipment units (30) in a defined group within the telecommunications network. The group call service server (18) receives a floor request from a requesting user equipment unit (32j) included in the group, and handles the floor request based on a media type associated with the floor request. In conjunction with such handling, in one aspect of its operation the group call service server prioritizes the floor request from the user equipment unit based on the media type (e.g., based on delay sensitivity of the media type associated with the floor request). In one example implementation, the group call service server comprises a queue (42) and a floor request handler (40). The group call service server queues the floor request from the requesting user equipment in the queue (42); the floor request handler (40) prioritizes the floor request within the queue based on the media type. In a specific example implementation, the group call service is Push-to-Talk over Cellular (PoC) and the group call service server comprises PoC server situated in a service network. Also provided are a group call service which handles the floor request based on a media type, and a message format for the floor request itself.

#### 

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation US
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation US
- of inventorship (Rule 4.17(iv)) for US only

### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.